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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/494,761	01/31/2000	Hyeon Jun Kim	P-082	3903

7590

10/04/2002

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P O Box 221200  
Chantilly, VA 20153-1200

EXAMINER

SHERALI, ISHRAT I

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 10/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/494,761

Applicant(s)

Kim et al.

Examiner

Ishrat Sherali

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12, and 13 is/are rejected.
- 7) ☒ Claim(s) 9-11 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 6) ☐ Other:

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-8 and 12-13 are rejected under 35 USC § 102 (b) as being anticipated by Chua et al.

Regarding claim 1, Chua discloses multilevel data structure which is characterized in that an image frame (See Chua, figure 1, shows multilevel data structure which is characterized in that an image frame ) including features of the image is expressed based on an image grid (See Chua, page 363, paragraph 3.1, right column, lines 7-10, color feature of is expressed based on an image grid) having at least two different hierarchical level (See Chua, page 364, paragraph 3.1, left column, lines 10-15, Chua shows image grid is obtained based on background color and object color i.e Chua shows two different hierarchical level [background color and object color]).

Regarding claim 2, Chua discloses hierarchical image grid includes cell and is hierarchically divided (See Chua, figure 1 shows image grid is divided into cells and Chua shows

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in page 364, paragraph 3.1, left column, image grid is hierarchically divided [background color and object color]).

each cell is assigned with color and reliability (See Chua, figure 1 shows each cell is assigned color and reliability [satisfy threshold and does not satisfy threshold] ),

color represent color feature of the region corresponding to the cell and reliability of the represent color (See Chua, figure 1, page 364, paragraph 3.1, left column, lines 21-30 shows color represent color feature of the region corresponding to the cell and reliability of the represent color).

Regarding claim 3-4, Chua discloses image grid uniformly divide the same number for width and height in case that an original image has same width and height (it is inherent in the system of Chua image grid uniformly divided same number for width and height in case original image grid has same width and height because to compare two images it is important that they have same size and their corresponding cells can be compared) and

in case original image and has different size for width and height one side is uniformly divided and other side is dividing unit of one side (it is inherent in the system of Chua one side is uniformly divided and other side is dividing unit of one side because to compare two images it is important that they have same size and their corresponding cells can be compared).

Regarding claim 5, Chua discloses matching spatial color feature of a reference image and target image (See Chua, page 365, paragraph 3.2, left column, lines 1-5, Chua shows matching spatial color feature of a reference image and target image ),

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which are represented to different hierarchical image grid levels (See Chua, figure 1 shows image grid is divided into cells and Chua shows in page 364, paragraph 3.1, left column, image grid is hierarchically divided [background color and object color]); and

searching image based on content based query by a user (See Chua, page 365, paragraph 3.2, left column, lines 1-10, Chua shows searching image based on content based query by a user) .

Regarding claim 6, Chua discloses matching each cell based on a similarity between the representative color vale having spatial color feature (See Chua, page 365, paragraph 3.2, left column, lines 1-10, Chua shows matching each cell based on a similarity between the representative color vale having spatial color feature).

Regarding claim 7, Chua discloses performing multi-cross in accordance with spatial color feature and comparing color similarities (See Chua, page 365, paragraph 3.2, left column, lines 19-20, Chua shows performing multi-cross in accordance with spatial color feature and comparing color similarities).

Regarding claim 8, Chua discloses matching color of each region thereby search similar regions (See Chua, page 365, paragraph 3.2, left column, lines 1-10, Chua shows matching color of each region thereby search similar regions ).

Regarding claims 12-13, Chua discloses searching the same position and different position between the same level in case search is performed by matching color region (See Chua, page

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365, paragraph 3.2, left column, lines 1-10, searching the same position and different position between the same level in case search is performed by matching color region ),

searching at the same position of different levels and at different position when searching the color similarity between different levels (See Chua, page 365, paragraph 3.2, left column, lines 19-25 searching at the same position of different levels and at different position when searching the color similarity between different levels ).

***Allowable Subject Matter***

3. Claims 9-11 are objected as being dependent on rejected base claim but would be allowable if rewritten in independent form including limitations of the base claim and any intervening claims

***Contact Information***

4. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Ishrat Sherali whoes telephone number is (703)-308-9589. The examiner can normally be reached on M-F (8:30 -5:00).

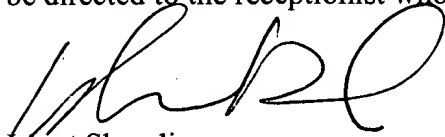
If attempts to reach the examiner by telephone number are unsuccessful, the examiner's supervisor, Leo Boudreau can be reached on (703)-305-4706. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9314 for regular communication.

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Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-4750.

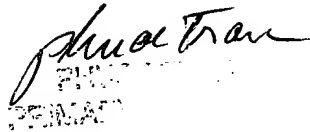


Ishrat Sherali

Patent Examiner

Group Art Unit 2621

September 29, 2002



John Tran  
Patent Examiner  
Group Art Unit 2621